M8 Phono

Owner's Information

The M8 Phono is a Level # phono pre-amplifier, developed for the best possible sonic performance rather than technical specifications. To this end, the M8 Phono incorporates thermionic valve technology to produce the most accurate sound possible and has been brought to maturity through a development process we call comparison by contrast, which is currently unique to Audio Note. The article from which this technique is based, named 'Audio Hell', is available from Audio Note by request.

Please read this manual carefully in order to obtain the best possible performance from your pre-amplifier. Audio Note wishes you many happy years of listening pleasure.

Technology

It is well known to any audio circuit designer worth their salt that accurate reproduction of music relies entirely on the preservation of the purity of the incoming signal. It is therefore not a difficult step to make to realise that the complexity of the circuitry itself must be kept to a minimum in order to retain the musicality of the original performance.

In response to this, all Audio Note pre-amplifiers use a single-ended, zero feedback circuit topology. The single-ended gain stage topology is simply the most linear, demanding pure Class A valve operation and removing the need for a phase splitter, which introduces unnecessary crossover distortion.

The Audio Note amplifier range does not make use of any kind of feedback. As a result, they were neither designed for vanishingly small harmonic or low intermodulation distortions, but instead for minimal non-harmonic and time base anomalies. It is these non-harmonic amplitude and time base distortion that have a highly perceptible and adverse affect on the signal waveform.

Our amplifiers are designed for maximum linearity without ‘corrective’ measures to keep transient distortions to a minimum rather than introducing the recursive errors inherent in feedback loops.

The M8 Phono features an ECC82 and 6463 line stage, a CV4068 phono stage, a 6X5 valve rectified power supply based on the M10’s Galahad PSU, silver wiring, 2 watt tantalum resistors, Black Gate filter capacitors, and Audio Note silver foil signal capacitors, silver wired HiB 50% nickel c-core output transformers and a balanced output.

Unpacking & Installation

Please take care when unpacking the pre-amplifier. We recommend that you store the packing materials in case the unit requires shipping at a later date.

Next, select a suitable location for the unit, ensuring that adequate ventilation is provided (the valves generate a fair amount of heat). In the interest of safe, reliable operation, situate the pre-amplifier well away from dampness or direct sunshine. Avoid sitting the M8 Phono close to any other equipment, such as a power amplifier, that may be generating a strong magnetic field, or in close proximity to active mobile telephones.

Worthwhile sonic improvements may be obtained by locating the unit on a specifically designed audio component support system; we tend to prefer natural materials such as wood.

The M8 Phono is capable of driving long interconnects to power amplifiers and so, if you are using mono block amplifiers, it may be worthwhile to locate them close to the speakers. This will reduce the speaker cable lengths and provide sonic improvements.

Connections

Please ensure that the M8 Phono, the power amplifier and any source equipment is switched off before making any connections.

NOTE: It is important that all connections are firm, secure and airtight; any oxidisation of the interconnects will result in loss of performance. Always use high quality interconnects; Audio Note interconnects are recommended, as they are manufactured to the same exacting standards as all of our products.

Inputs

The M8 Phono offers three standard unbalanced line inputs, one phono input and a tape input. The inputs each consist of a pair of RCA connectors, one red and one white, for right and left channels respectively.

The line inputs and tape input are suitable for connection to any line level source equipment, such as a CD or DVD player.

The phono input is suitable for connection to a turntable with a moving magnet (MM) type cartridge. Turntables with moving coil (MC) type cartridges will require a step-up transformer between the turntable and the pre-amplifier; Audio Note produce some of the best step-up transformers available.

Outputs

The M8 Phono provides two unbalanced outputs and a tape output. Again, all of these outputs consist of a pair of colour coded RCA connectors.

The two main outputs are for connection to a power amplifier and are identical, making them suitable for biwiring.

The tape output is routed directly from the input selection switch; this provides a suitable level for recording. The tape input is not routed to the tape output.

Ground Post

A ground connection is provided to assist in the elimination of any ground loops that may occur. A ground loop can be identified by excessive background hum. If you experience a ground loop, try connecting the ground connection with that of other system components. If the hum persists, contact your dealer.

Mains Power

An IEC power connector is located on the back of the M8 Phono. Use the supplied power cable to connect the pre-amplifier to the mains supply. Ensure the power is off at the switch when you do this.

Using the M8 Phono

Once all the connections are completed and checked, make sure all power amplifiers are off and flip the mains rocker switch located on the back panel of the pre-amplifier to the 'on' position.

The M8 Phono is a vacuum tube design and therefore requires about 45 seconds warm-up time. After this the remaining system components may be turned on.

NOTE: Always turn the pre-amplifier on before turning on the power amplifier and always turn the power amplifier off before turning off the pre-amplifier. This will prevent any buzzing or popping sounds from occurring.

In order to use the line inputs or phono input, select 'source' and the appropriate input. To listen to a tape select 'tape', the position of the source selector will not affect the output when 'tape' is selected. The volume control adjusts the overall output level of the pre-amplifier while the balance control can be used to correct minor imbalances in the stereo image. The balance control provides 9dB of attenuation for each channel. It will not reduce the volume of either channel to zero.

The M8 Phono will improve over time and will start to sound increasingly well balanced. This is because of the “bedding in” time taken by new electrical components inside the unit. Also, the pre-amplifier’s sound quality improves as the unit reaches its normal, stable operating temperature. Only a rear panel on/off switch is provided as the unit is designed for continuous operation. The M8 Phono need not be switched off each time after use. It is interesting to note that continuous operation not only results in optimum sonic performance (since the unit is maintaining a constant operating temperature) but also causes less electrical stress and so extends component and valve life.

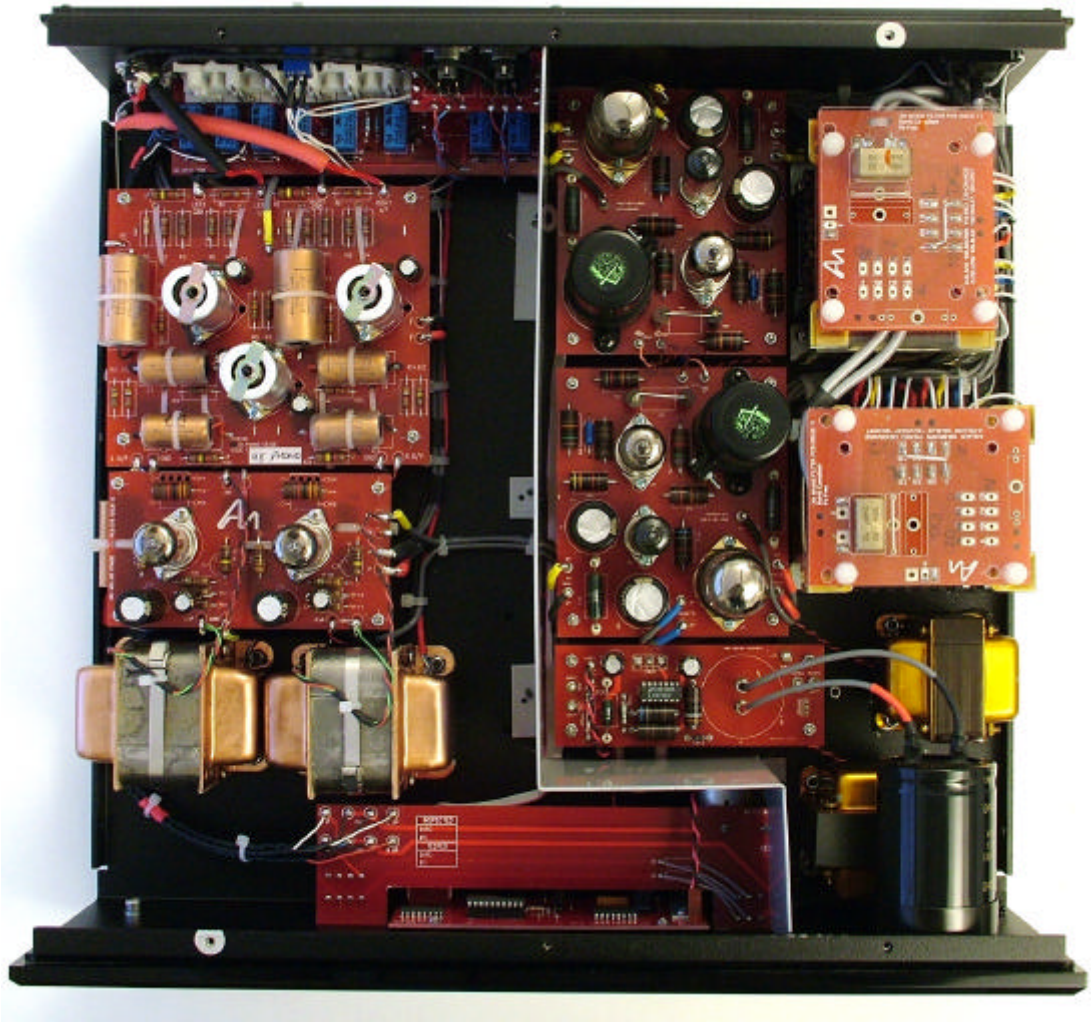
Cleaning

Cleaning the pre-amplifier is best done with a soft brush - some photographic stores are able to provide suitable brushes. Alternatively, a soft cotton cloth may be used with a mild propriety cleaner for removing dirt build-up. Strong or alcohol based solvents may damage the finish of this product. Ensure the pre-amplifier is switched off and cold when cleaning. Do not wet the unit.

Replacing and Upgrading the Valves

Replacement NOS valves can be purchased from Audio Note when valves fail or should you wish to experiment with different types of valves. A list of valves and equivalents can be found at www.audionote.co.uk. Contact your dealer if you are unsure what valves you should use or how to install them.

Line and phono stage valves should provide you with 5 years of continuous operation, rectifier valves should last much longer.



Warranty and Servicing

Audio Note warrants that this product will be free from defects in materials and workmanship for one year from the original date of purchase from an appointed Audio Note dealer. The valves are warranted for three months.

In the event that your Audio Note product requires servicing, please contact your Audio Note dealer. If the component needs to be shipped, please use the original packaging materials and include a copy of the sales purchase with a note, explaining, in as much detail as possible, the problems that your are experiencing with the unit.

Any modification not authorised by Audio Note will invalidate any warranty.

If you require technical support or have any questions, please direct them to your local Audio Note dealer or alternatively contact us directly at:

Customer Support
Audio Note (UK) Limited
25 Montefiore Road
HOVE
East Sussex
BN3 1RD
United Kingdom

TEL: +44 (0)1273 220511
FAX: +44 (0)1273 731498
EMAIL: info@audionote.co.uk

Specifications

Weight	16kg
Dimensions	141(h) x 445(w) x 410(d) mm
Max Power Consumption	81W
Fuse Ratings	1A anti-surge (110/120 V supply) 500mA anti-surge (220/240 V supply)
Input Impedance	100kO, Line 47kO, Phono
Gain @ 1kHz	18dB, Line 65dB, Phono
Input Sensitivity	126mV, Line
Output Noise (rms)	< 0.08mV, Line unweighted < 12mV, Phono unweighted
Output Impedance	< 10O
Tube Compliment	1x ECC82, 1x 6463, 2x 6X5, 2x ECL82, 2x OB2, 3x CV4068

NOTE: Due to Audio Note's ongoing research and development programme, specifications are due to change without notice.

Safety Information

HEAT: By the nature of vacuum tubes, this product generates high levels of heat. Adequate ventilation must be provided. Do not restrict the airflow through any of the ventilation slots or place the amplifier on any surface that may restrict airflow.

CAUTION: The vacuum tubes and other nearby parts operate at extremely high temperatures - KEEP OUT OF REACH OF CHILDREN.

HUMIDITY: Do not store or operate this unit in areas of high humidity or in close proximity to water. Do not expose the unit to liquid.

EARTHING: The product must be earthed - ensure that the mains supply cable is earthed.

SAFETY COMPONENTS: Internal fuses and other safety components are located inside this unit in accordance with BS 60065 requirements. In the event of component failure, replacements must be of the same part type. Such replacements must be carried out by a qualified service technician.

SHOCK: Internal operating voltages are lethal. Do not remove the top cover. Do not replace fuse without first disconnecting the unit from the mains supply.

This product complies with CE standards